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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,720	11/21/2003	Marc Vathauer	PO-7825/LeA 36,459	3173
34947	7590	04/25/2005	EXAMINER	
LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112			RONESI, VICKEY M	
		ART UNIT	PAPER NUMBER	1714

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/719,720	VATHAUER ET AL.
	Examiner Vickey Ronesi	Art Unit 1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/21/03, 4/1/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in claim 3, the phrase “at least one member is present in an amount of 1 to 12 parts by weight” is not supported by the specification. In particular, note page 22, lines 9-13; page 23, lines 20-23; page 24, lines 6-8 and 18-19 of the specification. See the discussion in paragraph 3 below.

### *Claim Objections*

2. Claims 1, 3, 4, 7, and 11 are objected to because of the following reasons:

- With respect to claim 1, in component E) the use of “poly” and “copolymer” to describe the same compound is redundant.
- With respect to claim 3, the word “the” should be inserted before “at least one member” in line 4 of the claim given that it has antecedent basis in line 1 of claim 2.
- With respect to claim 4, the word “(co)copolymer” is incorrect and should be replaced with the appropriate word, “copolymer” or “(co)polymer.”
- With respect to claim 7, to be consistent with claim 6 and to the other components in the alternative expression it is suggested that plural “diene rubbers” be replaced with singular “diene rubber.”
- With respect to claim 11, the word “member” on line should be replaced with the correct word “mineral.”

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 2, it is unclear how a “polymer additive” is different from additives C) and D).

With respect to claim 3, it recites the limitation "the mineral particles" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. Applicant only has basis for “the mineral in particulate form” or “the mineral.” Moreover, the phrase “at least one member is present in an amount of 1 to 12 parts by weight” causes confusion since it is not made clear if each member is present in an amount of 1 to 12 pbw or if the combined total of the at least one member is present in an amount of 1 to 12 pbw. In either case, applicant does not have support for either scenario in the present specification. See the discussion in paragraph 1 above.

With respect to claims 4 and 5, they appear to improperly recite a Markush group. Consequently, it is impossible to determine which elements of the group are required by the claims. When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if “wherein R is a material selected from the group consisting of A, B, C and D” is a proper limitation, then

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"wherein R is A, B, C or D" shall also be considered proper (emphasis added). See MPEP § 2173.05(h). In claim 5, the Markush language in B.1.1) is incomplete since the word "and" is missing after "alkyl-ring-substituted styrenes."

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-11, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 2002/0099136) in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405).

Park et al discloses a polyamide composition ([0013]-[0016]) comprising 50-95 parts by weight (pbw) polyamide resin; 1-45 pbw impact modifier such as those described in [0034]; compatibilizers such as those in [0031]; 1-80 pbw additives such as filler such as talc, carbon fiber, kaolin, wollastonite, and conductive carbon black ([0053]) and other additives ([0047]-[0054]). The composition is molded into a final product ([0055], [0057]).

Park et al does not disclose the use of polyesteretheramides, ester-ether block copolymers, or amide-ester block copolymers, nevertheless, note [0054] where Park et al supports the use of anti-static agents.

Ueda et al discloses an antistatic composition and teaches that the addition of a polyetheresteramide provides superior permanent antistatic properties as well as improved

mechanical strength and moldability when admixed in an amount of 3-40 wt % to a thermoplastic resin such as polyamide and copolymer resins (col. 2, lines 19-34; col. 5, lines 17-23).

Eckstein et al discloses the use of electrostatic dissipative polymer such as ester-ether block copolymers and ether-amide block copolymers (col. 12, lines 13-15) to impart antistatic properties when blended with base polymers such as nylon (i.e., polyamide) and terpolymers of vinyl monomers in an amount 25 pbw per 100 pbw total amount of polymer (col. 7, lines 5-30). These copolymers exhibit relatively low surface and volume resistivities without unacceptably high levels of extractable anions which provides decreased undesirable properties in a finished article of manufacture (col. 2, lines 38-46).

Given that Park et al is open to the use of antistatic agents and given the teachings by both Ueda et al and Eckstein et al regarding the advantageous properties had be utilizing their antistatic agents in polyamide compositions, it would have been obvious to one of ordinary skill in the art to utilize the presently claimed copolymers as antistatic agents in the composition of Park et al and thereby arrive at the presently cited claims.

5. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 2002/0099136) in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405) and further in view of Lavengood et al (US 4,713,415, cited on IDS dated 11/21/2003).

The discussion with respect to Park et al, Ueda et al, and Eckstein et al in paragraph 4 above is incorporated here by reference.

Park et al does not disclose the use of the presently claimed compatibilizer, however, note [0031] where Park et al advocates the use of suitable compatibilizers.

Lavengood et al discloses a rubber-modified nylon composition comprising nylon and a grafted impact modifier like presently claimed and teaches the use of a rubber-free vinyl copolymer described in col. 4, line 28 to col. 5, line 14 to compatibilize the nylon and graft copolymer to improve the miscibility of the blend, wherein 1-20 wt % of the compatibilizer is preferred (col. 5, lines 15-19).

Given that Park et al is open to the use of a compatibilizer and given that the presently claimed rubber-free vinyl copolymer is a known and suitable compatibilizer in nylon-rubber blends as taught by Lavengood et al, it would have been obvious to one of ordinary skill in the art to utilize the presently claimed rubber-free vinyl copolymer as taught by in the composition of Park et al and thereby arrive at the presently cited claims.

6. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 2002/0099136) in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405) and further in view of Newbould et al (US 3,899,462).

The discussion with respect to Park et al, Ueda et al, and Eckstein et al in paragraph 4 above is incorporated here by reference.

Park et al discloses the use of hydroxy-functional fillers ([0053]) but does not disclose the use of a phenol-formaldehyde resin. Nevertheless, it appears to be open to any suitable additive.

Newbould et al discloses a reinforced polyamide molding composition and teaches the advantageous use of phenol-formaldehyde resins as coupling agents in a composition comprising

hydroxy-functional fillers (col. 1, lines 45-49, 60-65). In particular, the phenol-formaldehyde coupling agents are stable at high temperatures, which is advantageous due to the high processing temperatures of polyamides (col. 2, lines 23-26). The fillers are treated with 0.1-5 wt % based on the amount of filler of phenol-formaldehyde (col. 5, lines 53-60).

Given that the polyamide composition of Park et al comprises hydroxy-functional filler and is open to the use of additional, suitable ingredients, it would have been obvious to one of ordinary skill in the art to utilize a high-temperature stable phenol-formaldehyde coupling agent as taught by Newbould et al to improve the compatibility between the resin matrix and filler material in the composition of Park et al and thereby arrive at the presently cited claims.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Two obviousness-type double patenting rejections are set forth below.

*Double Patenting, I*

7. Claims 1-3 and 5-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-7 of copending Application No. 10/623,777 (published as US 2004/0063857) alone or, alternatively, copending Application No. 10/623,777 in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405).

Appl. '777 claims a molding composition like that presently claimed with components present in identical or substantially overlapping amounts.

Although Appl. '777 does not explicitly disclose the use of polyesteretheramides, ester-ether block copolymers, or amide-ester block copolymers, such is clearly within the scope of Appl. '777's claims given the open claim language "comprising," thus warranting an obviousness-type double patenting rejection over Appl. '777 alone. Further evidence to support the examiner's position is found in either Ueda et al or Eckstein et al.

Ueda et al discloses an antistatic composition and teaches that the addition of a polyetheresteramide provides superior permanent antistatic properties as well as improved mechanical strength and moldability when admixed in an amount of 3-40 wt % to a thermoplastic resin such as polyamide and copolymer resins (col. 2, lines 19-34; col. 5, lines 17-23).

Eckstein et al discloses the use of electrostatic dissipative polymer such as ester-ether block copolymers and ether-amide block copolymers (col. 12, lines 13-15) to impart antistatic properties when blended with base polymers such as nylon (i.e., polyamide) and terpolymers of vinyl monomers in an amount 25 pbw per 100 pbw total amount of polymer (col. 7, lines 5-30).

These copolymers exhibit relatively low surface and volume resistivities without unacceptably high levels of extractable anions which provides decreased undesirable properties in a finished article of manufacture (col. 2, lines 38-46).

Given that Appl. '777 is open to the use of other ingredients as suggested by open claim language "comprising" and given the teachings by both Ueda et al and Eckstein et al regarding the advantageous properties had be utilizing their antistatic agents in polyamide compositions, it would have been obvious to one of ordinary skill in the art to utilize the presently claimed copolymers as antistatic agents in the composition of Appl. '777 and thereby arrive at the presently cited claims.

This is a provisional obviousness-type double patenting rejection.

8. Claims 1-3 and 5-8 are directed to an invention not patentably distinct from claims 5-7 of commonly assigned copending Application No. 10/623,777. Specifically, see the discussion set forth in paragraph 7 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302).

Commonly assigned copending Application No. 10/623,777, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

9. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being obvious over US 2004/0063857 alone or, alternatively, US 2004/0063857 in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405). Specifically, see the discussion set forth in paragraph 7 above.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

*Double Patenting, II*

10. Claim 1, 3, 10, 11, and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 4, 11, 12, and 16 of copending Application No. 10/719,403 (published as US 2004/0167,264) alone or, alternatively, in view of either Ueda et al (US 5,886,098, cited on IDS dated 11/21/2003) or Eckstein et al (US 6,140,405).

Appl. '403 claims a molding composition like that presently claimed with components present in identical or substantially overlapping amounts. Although Appl. '403 does not explicitly disclose the use of polyetheretheramides, ester-ether block copolymers, or amide-ester block copolymers, such is clearly within the scope of Appl. '403's claims given the open claim language "comprising," thus warranting an obviousness-type double patenting rejection over Appl. '403 alone. Further evidence to support the examiner's position is found in either Ueda et al or Eckstein et al.

Ueda et al discloses an antistatic composition and teaches that the addition of a polyetheretheramide provides superior permanent antistatic properties as well as improved mechanical strength and moldability when admixed in an amount of 3-40 wt % to a thermoplastic resin such as polyamide and copolymer resins (col. 2, lines 19-34; col. 5, lines 17-23).

Eckstein et al discloses the use of electrostatic dissipative polymer such as ester-ether block copolymers and ether-amide block copolymers (col. 12, lines 13-15) to impart antistatic properties when blended with base polymers such as nylon (i.e., polyamide) and terpolymers of vinyl monomers in an amount 25 pbw per 100 pbw total amount of polymer (col. 7, lines 5-30).

These copolymers exhibit relatively low surface and volume resistivities without unacceptably high levels of extractable anions which provides decreased undesirable properties in a finished article of manufacture (col. 2, lines 38-46).

Given that Appl. '403 is open to the use of other ingredients as suggested by open claim language "comprising" and given the teachings by both Ueda et al and Eckstein et al regarding the advantageous properties had be utilizing their antistatic agents in polyamide compositions, it would have been obvious to one of ordinary skill in the art to utilize the presently claimed copolymers as antistatic agents in the composition of Appl. '403 and thereby arrive at the presently cited claims.

This is a provisional obviousness-type double patenting rejection.

11. Claims 1, 3, 10, 11, and 13 are directed to an invention not patentably distinct from claims 2, 4, 11, 12, and 16 of commonly assigned copending Application No. 10/719,403. Specifically, see the discussion set forth in paragraph 10 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 10/719,403, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

*Correspondence*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/18/2005  
vr

*vf*

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